Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1- 256 (canceled).

Claim 257 (new): A system for desalinating water to yield desalinated water and a concentrate, the system comprising:

a first sea-going vessel being positioned on the surface of a body of seawater;

a membrane-based water desalination system installed on the first sea-going vessel, the membrane-based water desalination system capable of removing salt from seawater;

a water intake system installed aboard the first sea-going vessel, the water intake system configured to transport seawater from the body of seawater to the membrane-based water desalination system;

a concentrate discharge system installed aboard the first sea-going vessel, the concentrate discharge system configured to discharge the concentrate from the first sea-going vessel into the body of seawater;

a mixing system installed aboard the first sea-going vessel, the mixing system in communication with the membrane-based water desalination system and the concentrate discharge system and configured to dilute the concentrate with seawater before the concentrate is discharged into the body of seawater via the concentrate discharge system; and

a desalinated water transfer system installed aboard the first sea-going vessel, the desalinated water transfer system configured to transfer desalinated water from the membrane-based water desalination system to a means for delivering desalinated water from the first sea-going vessel to a land-based distribution system.

Claim 258 (new): The system of claim 257, wherein the mixing system comprises a mixing tank in which the concentrate is diluted with seawater prior to discharge of the concentrate from the first sea-going vessel into the body of seawater via the concentrate discharge system.

Claim 259 (new): The system of claim 258, wherein the mixing tank comprises a concentrate inlet, a concentrate outlet, a series of baffles, and a mixing barrier.

Claim 260 (new): The system of claim 258, wherein the mixing tank comprises a concentrate inlet, a concentrate outlet, an intake for seawater used to dilute the concentrate, and a device for mixing the concentrate and seawater used to dilute the concentrate to form a substantially homogenous mixture.

Claim 261 (new): The system of claim 260, wherein the device for mixing the concentrate and seawater used to dilute the concentrate to form a substantially homogenous mixture comprises a high speed paddle mixer.

Claim 262 (new): The system of claim 260, wherein the device for mixing the concentrate and seawater used to dilute the concentrate to form a substantially homogenous mixture comprises a static mixer.

Claim 263 (new): The system of claim 257, wherein the means for delivering desalinated water from the first sea-going vessel to the land-based distribution system comprises a second sea-going vessel, the second sea-going vessel operable to receive the desalinated water from the first sea-going vessel and to deliver the desalinated water to the land-based distribution system.

Claim 264 (new): The system of claim 257, wherein the means for delivering desalinated water from the first sea-going vessel to a land-based distribution system comprises a pipeline.

Claim 265 (new): The system of claim 264, wherein the pipeline comprises a sea-floor stabilized pipeline.

Claim 266 (new): The system of claim 264, wherein the pipeline comprises a sea-floor embedded pipeline.

Claim 267 (new): The system of claim 257, wherein the land-based distribution system comprises:

a water storage tank;

a pumping station; and

a pipeline or a pipeline network.

Claim 268 (new): The system of claim 257, wherein the membrane-based water desalination system is capable of producing desalinated water in the range of about 10 million gallons per day to about 100 million gallons per day.

Claim 269 (new): The system of claim 257, wherein the membrane-based water desalination system comprises a reverse osmosis system.

Claim 270 (new): The system of claim 257, wherein the membrane-based water desalination system is operable to produce desalinated water substantially continuously.

Claim 271 (new): A method comprising the steps of:

providing a first sea-going vessel being positioned on the surface of a body of seawater and having installed thereon a membrane-based water desalination system capable of removing salt from seawater, a water intake system configured to transport seawater from the body of seawater to the membrane-based water desalination system, a concentrate discharge system configured to discharge the concentrate from the first sea-going vessel into the body of seawater, a mixing system in communication with the membrane-based water desalination system and the concentrate discharge system and configured to dilute the concentrate with seawater before the concentrate is discharged into the body of seawater via the concentrate discharge system, and a desalinated water transfer system configured to transfer desalinated water from the membrane-based water desalination system to a means for delivering desalinated water from the first sea-going vessel to a land-based distribution system; and

transferring desalinated water from the first sea-going vessel to the land-based distribution system.

Claim 272 (new): The method of claim 271, wherein the step of transferring desalinated water from the first sea-going vessel to the land-based distribution system comprises:

transferring the desalinated water from the first sea-going vessel to a pipeline; and

transporting the desalinated water disposed in the pipeline to the land-based distribution system.

Claim 273 (new): The method of claim 272, wherein the pipeline comprises a sea-floor stabilized pipeline.

Claim 274 (new): The method of claim 272, wherein the pipeline comprises a sea-floor embedded pipeline.

Claim 275 (new): The method of claim 271, further comprising the steps of:

providing a storage tank;

communicating a pipeline or a pipeline network with the storage tank; and

communicating a pumping station with the pipeline or the pipeline network.

Claim 276 (new): The method of claim 271, wherein a rate of production of desalinated water is in the range of about 10 million gallons per day to about 100 million gallons per day.

Claim 277 (new): The method of claim 271, wherein the membrane-based water desalination system comprises a reverse osmosis system.